

Factors of Infertility: (Anatomical): 1-Ovarian 2-Tubal 3-Uterine 4-Semen

Anatomy of the Tube:

-Length: 10 - 12 cm -Divided into 4 parts:

a)Interstitial: only part without peritoneal covering, length 1 - 2 cm, diameter 1 - 2 ml (150 - 250 micron)

b)Isthmic: thick wall, length 2 - 3 cm, diameter 2 - 3 ml (max. 450 micron), 3 muscle layers (Sphincter)

c)Ampulla: length 5 cm, diameter 5 ml, Site of fertilization

d)Trumpet (Fimbria Ovarica): in direct relation to the ovary, pick up the ovum

***The lining of the tube is columnar epithelium that has Cilia which play an important role in reproduction**

***It had 2 Types of movements: -Towards ovaries (under progesterone) -Towards uterus (under estrogen)**

-> so patients under progesterone ttt is more susceptible to ectopic pregnancy

Tubal Factor of Infertility:

Incidence: represents 20 - 25% of infantile couple

Etiology:

1-Congenital: -Absence -Long/Short Tube -Hypoplasia -Accessory Ostia -Defect in cilial movement

2-Traumatic: Surgical (iatrogenic) (e.g. in appendectomy)

3-Inflammatory: -Specific: T.B., Syphilis, Bilharziasis -Non Specific: Pelvic inflammatory disease (PID)

4-Neoplastic: Myomas, Fibrosis inside or outside the uterus

5-Vascular: Post irradiation

6-Endometriosis

7-Adhesions

8-Previous Ectopic Pregnancy

Diagnosis: مفيش زمان ودلوقتي ، بنقول اللي بيستخدم فعلا

1-Hysterosalpingography: to determine the anatomical patency of the tube

2-Laparoscopy: to watch the exterior of the tube and the surrounding structures

****These tests can only detect anatomical patency of the tube but functions of the tube (e.g. the ability of fimbria to pick up ova or the cilial movement) is not tested**

Treatment:

1-Prophylactic: -The only etiology that has actual prophylaxis is PID

-Early diagnosis & ttt of Endometriosis -Proper surgical techniques in dealing with tubes

2-Surgical: -Pre-tubal Adhesiolysis -Tubal Microsurgery (reanastomosis / reimplantation)

-Tubal Cannulation -Neo-ostia (Salpingostomy)

***Site of the obstruction determines the surgical procedure (e.g. Fimbrial → Salpingostomy**

, Middle segment → reanastomosis, Proximal → Cannulation)

3-Assisted Reproduction Technology: (Micro-insemination)

-ICSI (Intracytoplamic insemination) -SZI (Subzonal injection)

-ZD (Zona drilling)

-PZD (Partial Zona dissection)